OREGON STATISTICAL REVIEW, DECEMBER 1958

(See pp. 7-8 for details)

• **Bank debits** in Oregon during December were 12.9 per cent higher than in December 1957. All regions had increases, with the southwestern Oregon region and the Burns region showing the greatest relative year-to-year gains. Compared with the November 1958 total debits, there was a 7.8 per cent gain in December.

• **Employment** in nonagricultural industry during December was 1.4 per cent above the December 1957 level. Year-to-year increases in lumber and wood-products manufacturing, contract construction, and government employment offset declines in other industries. Compared with November 1958, December employment dipped slightly, since declines in manufacturing were greater than increases in nonmanufacturing activities.

• **The index of man hours** worked in manufacturing (1951 = 100) stood at 80.4 for December 1958, compared with 77.4 in December 1957 and 84.6 in November 1958.

• **Average weekly earnings** of production workers in nonagricultural industry were up 4.0 per cent in December 1958 to $95.43 from the December 1957 figure of $91.75. Earnings also showed a slight gain of 1.4 per cent from the November 1958 level of $94.06.

• **Lumber** production in the Douglas-fir region of the Pacific Northwest in December 1958 was 13 per cent above the December 1957 level, but there was a seasonal fall of 13 per cent below the production of November 1958. New orders jumped to a level 27 per cent higher than the December 1957 weekly average. At the end of the month the file of unfilled orders was 26 per cent above last year and the lumber inventory 10 per cent below year-earlier levels.

• **Construction** contracts awarded in Oregon during November 1958 were 12 per cent above the value of those awarded in November 1957. Residential construction and public works and utilities construction scored year-to-year gains of 65 per cent and 35 per cent, respectively, to offset a sharp 45 per cent fall in nonresidential construction. All categories suffered seasonal cutbacks, with the result that total November construction was 55 per cent below that of October 1958. For the first eleven months of 1958, Oregon's total value of construction contracts, exclusive of public works and utilities, was 29 per cent higher than the comparable period of 1957.

• **Business failures** in Oregon during December totaled 47 involving liabilities of $616,000. This compares with the December 1957 record of 58 failures and $1,427,000 in liabilities. For the entire year of 1958, there were 532 failures and $11,608,000 of liabilities compared to 538 failures and $13,818,000 of liabilities in 1957.

The Oregon Economy Today: A Survey By Congressional Districts

By ROBERT CAMPBELL
Assistant Professor of Economics, University of Oregon

Most observers of the Oregon economy agree that the state has arrived at a crucial period in its development. The unprecedented expansion which occurred in the immediate postwar years seems to have run its course. Only the future can tell whether Oregon will experience a continued dependence on agriculture and forest products, or whether a greater degree of industrial diversification will emerge. While one can only hazard a guess as to the future course of development, there may be some value in knowing where we stand today, if only in general terms. This is the purpose of this brief survey—to take stock of the Oregon economy.

CLIMATE AND TOPOGRAPHY. Oregon is a state of wide contrasts. Its variations are apparent to any observer who moves about examining population, industry, or agriculture. This characteristic diversity has its roots in the basic physical features of the area, the two most important of which are the Pacific Ocean and the Cascade Range. The north-south line of the Cascades, whose crest divides the state about 100 miles east of the sea, acts as a barrier which separates the mild, moist, ocean-dominated areas of the west from the more severe and arid eastern portion of the state. Within each of these two distinct regions, however, there are subregions with variations of their own.

Along the coast there are few plains or valleys of any size. Lowlands give way rapidly to the Coast Range—a heavily forested area extending some forty miles or so inland in the north and to the Cascades in the south. The coastal mountains receive the state's highest annual precipitation (from 60 to over 100 inches), almost all in the form of rain. Between the Coast Range and the Cascades are the important lowland valleys of the west, with climates mild but somewhat less equable than those of the coast, and with considerably less annual precipitation (15 to 20 inches). The largest and least arid of these is the Willamette Valley, extending northward for over 100 miles from Lane County to the Columbia River. Others, of considerably smaller size, are associated with the Umpqua and Rogue River systems in the more mountainous south. The Cascade Range itself is characterized by a wide, densely forested, and deeply eroded western slope with heavy winter precipitation (over 50 inches), a large part of which is in the form of snow. The crest itself is a high plateau, dried and punctuated by more recent, high, volcanic peaks.

The region to the east, comprising almost 70 per cent of the state's area, consists largely of arid high plateau country with annual precipitation averaging less than 15 inches. Seasonal temperature ranges are much wider than those of the west as the moderating influence of the ocean is dissipated. The Wallowa-Blue Mountains system, which extends from the northeast corner down into the central portion of this region is an outstanding exception. Abruptly higher elevations in this range produce greater precipitation than that found in the balance of the area. Other exceptions

Oregon Business Review

VOL. XVIII EUGENE, OREGON, JANUARY 1959 No. 1

Bureau of Business Research, University of Oregon
WESLEY C. BALLAINE, Editor DAVID A. BAERNCOPF, Economist

Published monthly. Entered as second-class matter, August 10, 1948, at the postoffice at Eugene, Oregon, under the act of August 24, 1912. Persons wishing to receive the *Review* regularly should address requests to the editor. There is no subscription charge.

are found in the areas of lower elevation along the Columbia, in the Snake River Valley, and in the Baker and Grande Ronde valleys.

POPULATION AND RESOURCES. The direction of settlement and the resulting location of population have been almost entirely dictated by topographic and climatic conditions. The Willamette Valley and adjacent areas, with conditions best suited to agriculture, have led the state in economic development and population growth. Today the ten counties in, or immediately adjoining, the valley contain almost exactly two-thirds of the total population, with Multnomah county (Portland) alone containing over 30 per cent. The eighteen counties lying to the east of the Cascade Range, occupying an area much larger than the more settled western portion, contain only 14.7 per cent of the state's people. The population density there is 3.8 per square mile, compared to 50.3 in the western region and an average of 56.4 for the United States.

As the earlier exploitation of the rich agricultural resources of the western part of the state has yielded economic leadership to the forest-products industry, the resource base has remained on the same side of the Cascades. The center of gravity has shifted, however, from the more accessible timberlands of the northwest to the southwestern counties, which today contain one of the largest softwood forests of the world, most of which consists of the valuable Douglas fir species.

Following the exploitation of the forests, the locus of most rapid population growth has moved from the northwest to the southwest. From 1950 to 1958 it is estimated that there has been a state-wide population increase of 13.5 per cent, with an increase of more than 10 per cent occurring in the first four years of the period alone. While the northwestern counties comprising the first and third congressional districts have gained slightly less than 15 per cent, the counties of the fourth district, in the southwestern center of forest products development, have experienced a 17.4 per cent increase over the same period. In contrast, the eighteen eastern counties making up the second congressional district have had a much more restricted growth in recent years. While irrigation has permitted a localized intensive agriculture, most of the eastern area is suitable only for grazing, with limited areas of dry cropping, principally along the Columbia. Except in the higher elevations related to the Blue Mountains system and the eastern slope of the Cascades, forest resources are limited and consist primarily of slower-growing species, among which Ponderosa pine is the most important. This region has gained population at a rate of only 2.3 per cent since 1950 with seven out of eighteen counties either falling behind or remaining stationary in population. Table 1 summarizes data on population for the state and its regions.

The principal resources of the state are its soil, its forests, and its people. Oregon's resources are, with few exceptions, either of little commercial importance or of insufficient richness to justify exploitation. The state's abundant water resources have led to a considerable development of hydroelectric power, but this has not proved successful as a positive stimulus for diversified industry. As a consequence Oregon has been aptly described as an economy expanding outward upon a relatively narrow resource base.[1] A small local population and great distances from national population centers has led to a type of economic development oriented toward specialized export of raw or semi-processed products of farm and forest.

TABLE 1. POPULATION DATA BY DISTRICTS, 1958

	Population	*Area in Square Miles*	*Density (per sq. mi.)*	*Percentage Increase 1950-1957*	*Counties Approx. Stationary or Losing*
First	499,310	9,461	52.8	14.9	4
Second	253,140	66,829	3.8	2.3	7
Third	542,030	424	1,278.4	14.9	....
Fourth	432,150	19,604	22.0	17.4	....
State	1,726,630	96,318	17.9	13.5	11

Source: Population estimates by the Oregon State Board of Census.

INDUSTRY AND AGRICULTURE. The development of Oregon industry has been founded upon the export, both to the rest of the United States and to the rest of the world, of the products of its basic raw materials. In the past agriculture, particularly the wheat trade, was of primary importance. Today, while agricultural staples and, more recently, specialties, continue to provide an important foundation, the forest-products industry has become the major industrial base upon which other manufacturing and nonmanufacturing activities have been built up. It has been estimated that, in 1955, almost half of the income from productive activities in Oregon was earned from out-of-state sales. Of this total 65 per cent was earned by the wood-products industry and 15 per cent by agricultural products and processing. The respective percentages in 1939, when "exports" were only slightly less important, were 45 per cent and 26 per cent.[2]

While in general the growth of manufacturing and trade has developed around the natural-resource core, the Portland area represents a possible exception. Located at the confluence of the Willamette and Columbia rivers, Portland has access, by water or water-level route, both to the Pacific and to the "Inland Empire" to the east. Its strategic position in transportation has led to a considerably greater development as a trade, transport, and financial center than could have been supported by the Oregon economy alone. This fact, together with the advantages flowing from its possession of the state's only center of concentrated population, has made Portland an island of diversification in Oregon's highly specialized economy.

THE STRUCTURE OF INCOME AND EMPLOYMENT. The only current data on state income are made available by the U.S. Department of Commerce through its series on personal income by states and regions. In 1957 Oregon's per capita personal income stood at $1,914, compared to a national average of $2,027. This $1,914 figure ranked twentieth among the states, between Wisconsin's $1,920 and Montana's $1,896. The data ranged from a low of $958

[1] Cohn, *Industry in the Pacific Northwest and the Location Theory*. (New York, 1950).

[2] Paul Simpson, "'Export' Requirements for Economic Growth of the Pacific Northwest," *Oregon Business Review*, Sept. 1957.

(Mississippi) to a high of $2,821 (Connecticut). Following a sharp rise in the rankings during the immediate post-war period, Oregon's per capita personal income has recently not kept pace with the rise in the national average.[3] Thus, while the United States average figure rose from $1,961 in 1956 to $2,027 in 1957, the corresponding change for Oregon was a decline from the $1,934 estimated for 1956.

TABLE 2. PERSONAL INCOME BY MAJOR SOURCES: PERCENTAGE DISTRIBUTION FOR 1957

	Percentage Distribution in: U.S.A.	Oregon
Wage & Salary disbursements	68.2	63.3
Other labor income	2.6	2.1
Proprietor's income	12.5	17.3
Farm	3.4	4.4
Nonfarm	9.1	12.9
Property incomes	12.4	12.1
Transfer payments	6.2	7.3

Source: U. S. Department of Commerce, *Survey of Current Business* (Aug. 1958), pp. 14, 20.

Some interesting characteristics of the composition of Oregon personal income can be noted in Tables 2, 3, and 4. Table 2 indicates a greater relative importance of income from proprietorship in Oregon than is the case in the United States as a whole. While this is partially accounted for by the greater relative importance of agriculture in the state, it is characteristic of nonfarm activities as well (lumber and trade are cases in point). The lesser relative importance of the wage and salary component is jointly explained by the proprietorship feature together with the larger transfer-payment category—which is enhanced not only by Oregon's greater proportion of age but by its greater than average unemployment during 1957.

TABLE 3. INDUSTRIAL SOURCES OF CIVILIAN INCOME RECEIVED FOR PARTICIPATION IN CURRENT PRODUCTON: PERCENTAGE DISTRIBUTION FOR 1957

	Percentage Distributions for: U.S.A.	Oregon
Farms	5.2	7.4
Mining	1.8	0.3
Contract construction	6.7	6.7
Manufacturing	31.1	25.2
Wholesale & retail trade	19.4	21.8
Finance, insurance, & real estate	4.7	4.6
Transportation	5.4	6.6
Communication & public utilities	2.8	3.2
Service Industries	11.8	11.8
Government	10.8	11.9

Source: U. S. Department of Commerce, *Survey of Current Business* (Aug. 1958), p. 21.

In Table 3 civilian income from individual participation in current production, a more limited aggregate consisting only of wage and salary and proprietorship incomes, is allocated among major industrial sources. Features of interest are the greater relative importance in Oregon of farm income, income from wholesale and retail trade, income from transportation, communication, and public utilities, and civilian governmental income. In contrast is the less than average importance of mining and manufacturing as sources of income. The Portland area, serving, as has been noted, a trading area much larger than the state and providing over half the state-wide employment in retail and wholesale trade, contributes considerably to the relative importance of the trade sector. Outside of Portland the state's manufacturing industry exceeds the national average in importance, both in income and employment; this is still another reflection of the dominance of lumber and wood products in the state's economy. Not only Portland's strategic position but Oregon's sparse population and distance from markets enhances the significance of the transportation, communication, and utilities group. Within the state, mining is insignificant; and 75 per cent of the employment provided by mining is in the ubiquitous nonmetallic mining and quarrying category compared to a United States average of only 14 per cent of total mining employment in this area. While Oregon's total civilian governmental income is slightly higher than the national average, income (and employment) provided by the Federal government is smaller and is offset by a substantially larger share of income originating at the state and local level. This is in turn reflected in the provision of public services (such as education), which would place the state well above its ranking in the personal income scale.

[3] Paul Simpson, "Factors in Oregon's Relative Income Decline Analyzed," *Oregon Business Review*, Mar. 1957.

THE UNIVERSITY AND THE BUSINESS COMMUNITY

- The School of Business Administration is planning a one-day business conference in Portland on March 3. Speakers will include University of Oregon faculty members, Raymond J. Saulnier, chairman of the President's Council of Economic Advisors, and David L. Grove, economist for the Bank of America.
- The Institute of Oregon Underwriters held its 1959 Advanced Campus Seminar on "Analysis of the Fire Insurance Contract" at the University January 14-17. Dr. Mark R. Greene was educational adviser.
- The Fifth Annual Institute of the American Institute of Real Estate Appraisers was held at the University January 19-31. Realtors from all states in the Pacific Northwest enrolled.
- A conference to discuss the theoretical implications of various forms of taxation upon the conservation of privately-owned timber was held on the campus January 27 and 28. The conference was made possible by a grant to the Bureau of Business Research from Resources for the Future, an agency associated with the Ford Foundation. Participants were economic theorists and forest economists from Oregon, California, and British Columbia.

TABLE 4. EMPLOYMENT AND WAGES AND SALARIES IN SELECTED MANUFACTURING INDUSTRIES: PERCENTAGE DISTRIBUTION FOR 1957

	Percentage Distribution of: Manufacturing Employment U.S.A.	Oregon	*Wages & Salaries in Manufacturing* U.S.A.	Oregon
Metals & Machinery (except electrical)	24.9	11.2	28.9	12.9
Transportation equipment	11.2	2.4	13.3	2.6
Food & kindred products	9.0	13.2	8.2	11.3
Apparel	7.1	2.0	4.6	1.3
Textiles	6.0	1.8	4.2	1.5
Electrical equipment	7.3	1.7	7.6	1.8
Printing & publishing	5.1	3.8	5.5	4.1
Lumber & wood products	3.9	52.8	2.8	52.8
Paper & allied products	3.4	5.3	3.5	5.8
Furniture & fixtures	2.2	1.5	1.9	1.3

Sources: U. S. Department of Commerce, *Survey of Current Business* (Aug. 1958), pp. 22, 23. U. S. Department of Labor, Bureau of Labor Statistics, *Unemployment and Earnings*, Annual Supplement, July 1958.

Manufacturing industry is singled out for special attention in Table 4. Selected Oregon industries are compared with their counterparts nation-wide, both as sources of employment and of wages and salaries. It is apparent that both sources are much more heavily concentrated within the state. The lumber and wood-products industry alone accounts for more than half of the income and employment. Only three other industries provided over 5 per cent of

total manufacturing employment. Food and kindred products, with important canning and preserving activities associated with the state's agricultural production added to its more ubiquitous aspects, provided 13.2 per cent of the total, only slightly in excess of the national average. The metals and machinery group, at 11.2 per cent of manufacturing employment (over three-fourths in Portland), fell far short of the United States average of almost one-fourth. In spite of the plentiful raw materials available, paper and paper products provided only 5.3 per cent of the jobs in manufacturing, somewhat higher than the national figure of 3.4 per cent. Within the lumber and wood-products category, the plywood industry, of negligible importance before the war, has become the fastest growing major industry in the state and provided a fifth of the total lumber and wood-products employment. However, extraction and primary processing by logging and sawmill operations in 1957 still provided almost three-fourths of the industry's jobs and well over a third of all manufacturing employment.

TABLE 5. RELATIVE SHARES OF DISTRICTS IN FARMS AND FARMLAND: 1954

	District Share in State Total			
	First	*Second*	*Third*	*Fourth*
Total land area	9.8	69.4	0.4	20.4
Land in farms	9.7	78.4	0.3	11.7
Cropland	19.3	66.1	0.7	13.9
Woodland on farms	14.9	61.8	0.3	23.0
Land in pasture only	1.6	93.1	0.1	5.1
Irrigated lands	7.4	83.4	0.3	8.8
All farms	42.4	26.5	3.1	28.1
All commercial farms	40.6	34.0	2.5	22.8

Source: Oregon State College Agricultural Experiment Station, *Atlas of Oregon Agriculture* (based upon data from the 1954 *Census of Agriculture*).

In 1954, Oregon's 54,441 farms covered slightly over one-third of the land area of the state (over half of which was in Federal ownership). Of these farms, 32,128 or nearly 60 per cent were classed as commercial (farms selling products of value in excess of $250 and accounting for the major portion of the operator's time and income). Of the total area in farms about one-fourth was in croplands, about 50 per cent in pasture only, and 22 per cent in farm woodlands. Of the total farm area, 7.1 per cent was under irrigation—including that receiving only supplemental irrigation. Over 80 per cent of the irrigated lands was in the river basins to the east of the Cascade Range. The average size of farms was 386.6 acres; the size range was considerable (half the farms were under 50 acres in size and 13.3 per cent over 500 acres). Smaller scale, more intensively cultivated farms and farm woodlands were characteristic of the western region, while in the east such operations tended to be limited to the irrigated areas. Extensive dry-crop and range livestock production were more typical in the east and contributed to the large average farm size and capital investment associated with agriculture in Oregon.

In 1956 it is estimated that net income per farm in the state averaged $2,886 compared to a national average of $2,337.[4] Gross cash receipts of farms by principal commodities together with estimated gross F.O.B. processed values are shown in Table 6. Meat-animal and wool sales (over 95 per cent meat animals) ranked as the most important single source of cash farm income. Upwards of two-fifths of meat-animal sales were for slaughter and processing outside the state. Sale of food grains, almost entirely wheat, brought in the second highest cash income. While these two commodity groups remain important when

[4] U.S. Department of Agriculture, *The Farm Income Situation* (Feb. 1958).

TABLE 6. MAJOR SOURCES OF CASH FARM INCOME: 1956

	Income Received by Farmers (millions of dollars)	*Total F.O.B. Processed Value (millions of dollars)*
Livestock:		
Meat animals & wool	$ 80.8	$ 95.9
Dairy products	46.2	83.1
Poultry & products	40.0	50.2
Miscellaneous	5.7	5.7
	$172.7	$234.9
Field Crops:		
Food grains	$ 48.4	$ 49.6
Feed grains & hay	34.7	35.2
Seed crops	17.0	21.0
Potatoes	14.5	18.9
Specialties	11.8	16.8
	$126.4	$141.5
Horticultural Crops:		
Tree fruits & nuts	$ 24.8	$ 46.7
Vegetables	29.6	78.5
Small fruits	16.6	33.6
Specialties	11.1	11.1
	$ 82.1	$169.9
Farm Forest Products	$ 13.6	$ 23.9
Total	$394.9	$570.6

Source: Oregon State College, Agricultural Experiment Station, *Oregon Farms Generate Buying Power* (May 1958).

processing values are added, their relative significance diminishes compared to some of the more intensively cultivated crops which are processed largely within the state. Vegetables and small fruits, for example, more than double their value in processing, and additions of value almost as large were experienced by dairy products and tree fruits and nuts.

In some of their highly specialized crops, Oregon farms were highly placed in national rankings. This was true of green peas, snap beans, strawberries, walnuts, filberts, pears, and mint, among others. Recent years have seen a continued shift away from the older staples and toward more intensive specialization. Other trends, following national patterns, have included a decrease in the number of farms and an increase in their average size. It appears likely that further developments in Oregon agriculture will be limited to price-induced and technologically induced shifts in the pattern of commodity specialization. The industry, which has become of decreasing relative importance in the economy, is unlikely to reverse this trend, which duplicates nation-wide developments.

Regional Variations in the Structure of Employment and Industry. The congressional district is not, in general, analytically satisfactory as a distinct economic unit, nor for that matter is the state or even the region. However, it appears that, in the case of Oregon, the congressional districts possess sufficiently different economic

TABLE 7. RELATIVE SHARES OF DISTRICTS IN POPULATION AND EMPLOYMENT IN COVERED INDUSTRIES: 1957

	District Share in State Total			
	First	*Second*	*Third*	*Fourth*
Population	28.5	14.7	30.9	26.0
Covered employment	18.2	12.0	44.7	23.4
Covered employment in:				
Agriculture, forestry, fisheries & mining	23.5	14.4	17.1	40.2
Contract construction	18.1	13.8	47.0	17.6
Manufacturing	23.2	12.8	30.8	33.2
Transportation, communication, & public utilities	12.7	9.5	59.2	17.1
Wholesale & retail trade	16.1	11.9	51.5	18.3
Finance, insurance & real estate	12.8	6.2	68.4	11.4
Service industries	16.9	11.7	50.9	19.9
Federal government (civilian)	11.5	13.5	48.5	15.4

Source: Oregon State Unemployment Compensation Commission, Research and Statistics Division, *Oregon Covered Employment and Payrolls, 1957*. Covered firms are limited to those employing two or more and exclude those engaged in ocean transport and interstate rail transport. State and local governments are also major exclusions. Total covered employment in 1957 constituted 77 per cent of the total nonagricultural employment reported by the Bureau of Labor Statistics.

characteristics to justify their separate treatment. The first district consists of the ten counties making up the northwestern corner of the state from the crest of the Cascades to the Pacific excluding, however, Multnomah County. This county alone makes up the third congressional district, whose population and industry are concentrated in the city of Portland. The second district includes all the eighteen counties to the east of the Cascade Range, while the rest of the state—the seven southwestern counties—comprise the fourth district.

As can be seen from Table 7, Multnomah County leads the state in population, in total employment, and in most industrial categories of employment. Notable exceptions are the agriculture, forestry, fisheries, and mining group and manufacturing, the largest share of which was claimed by the fourth district. As an approximate generalization it could be argued that the first and second districts led in agricultural production—the first district (with almost half of its farmland in crops) ahead in the specialized commodities with higher processing margins, while the second district (with almost 60 per cent of its farmland in pasture only) maintained the leadership in staple crops and livestock production. While there are a number of localized centers of intensive, usually irrigated, agriculture in the east, the average size of farms there, 1,143 acres in 1954, reflected the prevalence of large-scale extensive operations. In the west, average farm size in the first district was 88.6 acres, rising to 161.5 acres in the fourth district where over 40 per cent of farmland was in forests.

Unfortunately there are no recent distributions of gross or net farm income by counties, but it is possible to locate approximately the major activities listed in Table 6 by area. The largest source of gross cash revenue—the sale of meat animals—was concentrated in the eastern and southern belt of counties in the second district. Although more widely dispersed, dairying was predominately centered in the Willamette Valley and the coastal areas, increasing in importance as one moved to the north. The Snake River area of the second district was the only eastern dairying area of importance. Poultry again was a western specialty focused in the northern Willamette Valley portion of the first district. Wheat, making up the bulk of the food grains, although originally the dominant crop state-wide, has recently become largely limited to the northern tier of the eastern counties. There, too, was to be found the center of feed-grain production, of which barley, substituted for quota-restricted wheat, is the most important commodity. Feed corn, of minor importance, was found primarily in the Snake River region of Malheur County. Hay production was diffused over the state, although alfalfa hay was entirely an eastern product. Seed crops, principally grass and legumes were limited to the Willamette Valley, with heaviest concentrations in Lane and Linn counties of the fourth district. Potatoes were found in three principal locations, all irrigated lands of the second district.

Tree crops, of which pears were the largest source of income (about half of unprocessed value) were found in four principal areas. In the west, the Rogue River Valley of the southwest led, followed by the Willamette Valley (especially important for nut crops). In the east, the Hood River-Dalles area was the leader with some additional production in the Milton-Freewater area of Umatilla County. Leading vegetables produced were snap beans (Willamette Valley) and green peas (Umatilla County). Berries, particularly strawberries, were a significant crop in the northern Willamette Valley and adjacent areas. Some important specialty crops were sugar beets, of importance in the Snake River region, and mint and hops, found in the Willamette Valley.

Relative Importance of Manufacturing. As Tables 7 and 8 show, the fourth district led the state in manufacturing both in absolute numbers of workers employed and in the relative importance of manufacturing employment within the district. In 1957 this district accounted for almost exactly one-third of state-wide manufacturing employment, while manufacturing activity provided 51.7 per cent of the district's jobs in all covered industries. Within the district 86.7 per cent of this employment in manufacturing was in the lumber and wood-products industry. In terms of absolute numbers, the third district followed with 30.8 per cent of the total state employment in manufacturing. Relatively, however, Multnomah County with only 25.1 per cent of its employment in manufacturing trailed both the first district and the second district with 46.7 per cent and 38.8 per cent, respectively, of their total jobs provided by manufacturing industries. Only in the third district did manufacturing industry fail to rank first among the employment categories, being exceeded there by trade, which employed 32.4 per cent of the covered workers.

TABLE 8. THE STRUCTURE OF EMPLOYMENT: ABSOLUTE AND PERCENTAGE DISTRIBUTIONS OF COVERED EMPLOYMENT WITHIN THE CONGRESSIONAL DISTRICTS OF OREGON: 1957*

	District 1		*District 2*		*District 3*		*District 4*		*State Total*	
	Absolute	%	*Absolute*	%	*Absolute*	%	*Absolute*	%	*Absolute*	%
Agriculture, forestry, fishing, & mining	509	0.8	313	0.7	370	0.2	871	1.0	2,167	0.6
Contract construction	3,935	5.9	3,007	6.8	10,225	6.2	3,831	4.4	21,737	6.0
Manufacturing†	31,125	46.4	17,111	38.8	41,354	25.1	44,511	51.7	134,114	36.4
Food & kindred products	5,838	18.6	2,585	15.1	7,078	17.1	2,240	5.0	17,909	13.4
Lumber & wood products (including furniture)	14,536	46.7	12,642	73.9	6,304	15.2	38,607	86.7	72,225	53.9
Paper & products, printing & publishing	5,027	16.2	628	3.7	5,982	14.5	1,639	3.7	13,687	10.2
Metals & machinery (except electrical)	1,717	5.5	90	0.5	11,704	28.3	1,400	3.1	14,917	11.1
Electrical machinery	1,394	4.5	....	....	734	2.0	....	....	2,286	1.7
Transportation equipment	....	....	....	....	2,774	6.7	....	....	3,201	2.4
Textiles & apparel	1,155	3.7	....	....	3,740	9.0	....	....	5,178	3.9
Transportation, communication & public utilities	4,101	6.1	3,068	7.0	19,121	11.6	5,532	6.4	32,288	8.8
Wholesale & retail trade	16,710	24.9	12,375	28.0	53,356	32.4	18,993	22.1	103,583	28.1
Finance, insurance & real estate	2,205	3.3	1,074	2.4	11,802	7.2	1,969	2.3	17,262	4.7
Service industries	6,134	9.1	4,255	9.6	18,512	11.2	7,218	8.4	36,361	9.9
Federal civilian employment	2,322	3.5	2,729	6.2	9,838	6.0	3,131	3.6	20,266	5.5
Total covered employment	67,128		44,128		164,604		86,108		368,009	

Source: Oregon State Unemployment Compensation Commission, Research and Statistics Division, *Oregon Covered Employment and Payrolls*. Quarterly Series, 1957.

* Distributions will not compare with those in Table 4, since covered employment is a more restricted concept than nonagricultural employment. Because of the limitations of the data, some industries have been consolidated.

† Percentage distributions within manufacturing are proportions of manufacturing employment, not total employment.

The character of manufacturing also varied by district. While lumber and wood products led employment in all but the third district, its relative importance fell from a high of 86.7 per cent in the fourth district to 73.9 per cent in the second district and 46.7 per cent in the first district. In Multnomah County, where lumber and wood products supplied only 15.2 per cent of the jobs, the metals and machinery group led with 28.3 per cent of manufacturing employment. The rather unique place of Portland in the Oregon economy, mentioned earlier, was also reflected in a structure of employment within manufacturing much more like the United States average than was the case elsewhere in the state.

Other Industries. Following manufacturing, the trade group generally ranked second in importance as a source of employment (as noted above it ranked top in the third district). Compared with Multnomah County's 32.4 per cent, the second district found 28 per cent, the first district 24.9 per cent, and the fourth district 22.1 per cent of covered employment offered by wholesale and retail trade. The third district also led in the relative importance of the service industries, which accounted for 11.2 per cent of employment there compared to 9.6 per cent in the second, 9.1 per cent in the first, and 8.4 per cent in the fourth district. In the finance group, the leadership of Multnomah County in absolute numbers employed was duplicated in terms of relative significance with 7.2 per cent of its employment in that category. In no other district was the finance group's relative importance even half so large. The second district of eastern Oregon, with 6.2 per cent of its workers employed by the Federal government, had the highest proportion of employment in that category; in five of the eastern Oregon counties such employment accounted for 10 per cent or more of the covered jobs (and a still larger proportion of total payrolls).

Intra-district Manufacturing Patterns in 1957. Within the first district, the relative importance of manufacturing employment varied from a low of 32.9 per cent in Marion County to a high of 66.7 per cent in Polk County. In all ten counties of this district manufacturing accounted for the largest proportion of covered employment, although in Marion County trade, at 32.6 per cent, was of almost equal importance. Within the manufacturing sector, employment in lumber and wood products varied in significance from 94.6 per cent in Lincoln County to 19.3 per cent in Washington County, where the electrical-equipment industry led manufacturing. The 37.3 per cent of Washington County's manufacturing jobs provided by this industry also made the county the state-wide leader in electrical equipment employment. The lumber industry was also exceeded in relative importance by the paper and printing group in Clackamas County (36.1 per cent compared to 30.0 per cent) and in Marion County (22.4 per cent compared to 21.6 per cent). Food and kindred products, which led manufacturing in Marion County (43.7 per cent of employment), was also significant in Clatsop County (38.7 per cent, primarily sea-food canning), Polk County (26.7 per cent), Washington County (18.9 per cent), Yamhill County (18.1 per cent), and Tillamook County (16.9 per cent, mostly dairy products). In the counties mentioned, other than those on the coast, vegetables and fruits, (particularly small fruits) and poultry were important products processed. As with most food processing in the state, the employment percentages are based upon annual average data which embody very large seasonal fluctuations. Unrecorded in the data is associated employment, also subject to wide seasonal variations, involved in the cultivation and harvesting of agricultural commodities. The first district used the great majority of such labor hired in the state.[5]

The second district, composed of the eighteen eastern counties, showed the greatest internal diversity. Manufacturing employment, as a percentage of total covered employment, ranged from 82.7 per cent in Wheeler County down to zero in Sherman County. It was exceeded in relative importance by trade in several of the counties most highly specialized in agriculture: Gilliam, Morrow, Sherman, Wasco, and Malheur. In Jefferson County contract construction, primarily in connection with a hydro-electric project, was the largest single source of employment (27.7 per cent compared to 25.4 per cent in manufacturing). Within manufacturing, lumber and wood products as a source of jobs varied in relative importance from 100 per cent in Wheeler County and over 90 per cent in Crook, Grant, Jefferson, Lake, Union, and Wallowa counties, down to zero in Sherman, Malheur, and Gilliam counties. Food and kindred products was the leader in Malheur County (94.4 per cent of manufacturing employment). The food group was also of importance in Hood River County (35.7 per cent compared with lumber's 51.8 per cent) and Umatilla County (35.9 per cent compared to 42.9 per cent for the lumber group). The only other category within manufacturing to account for more than 10 per cent of employees was paper and printing in Umatilla County (12.4 per cent).

As has already been noted, the third district was characterized by Portland's importance as a trade, distribution, and financial center both for the state and for a large part of the Pacific Northwest region. Within manufacturing, which followed trade in relative importance as a source of jobs, metals and machinery led with 28.3 per cent, followed by food and kindred products (17.1 per cent), lumber and wood products (15.2 per cent), paper and printing (14.5 per cent), textiles and apparel (9.0 per cent), and transportation equipment (6.7 per cent). Manufacturing employment was thus much more evenly distributed among industries than was the case in the other districts.

In contrast to the other two multi-county districts, the fourth district of southwestern Oregon displayed much more homogeneity in its manufacturing employment patterns. In all seven counties manufacturing was of greater relative importance than the average for the state (although it was considerably lower in Jackson County—37.6 per cent compared to the district average of 51.7 per cent). Similarly, in all counties the lumber and wood products industry supplied over 80 per cent of the jobs in manufacturing. In no county did any other industry account for as much as 10 per cent of manufacturing employment. The metals and machinery group (largely limited to primary metals) rose to 5.4 per cent in Douglas County (nickel) and 6.7 per cent in Linn County (rare light metals). Food and kindred products was of some significance in three counties: Jackson (6.9 per cent), Lane (8.9 per cent), and Linn (6.1 per cent). Paper and products, joined with

[5] Oregon State Employment Service, *Oregon Post-Season Farm Labor Report 1957*, estimates a state-wide range during the season May 1 to November 1 of from 7,580 to 70,412 hired farm laborers. Offices in the first district handled over 80 per cent of the peak demands.

printing and publishing, exceeded 5 per cent only in Lane County. It seems clear that the fourth district is the pre-eminent lumber and wood products center for the state. Not only is this industry of greatest relative importance in the district, but the employment it provided constituted 53.5 per cent of the state-wide employment in the lumber category.

Shiverin' Timbers: Variations In Lumber Production

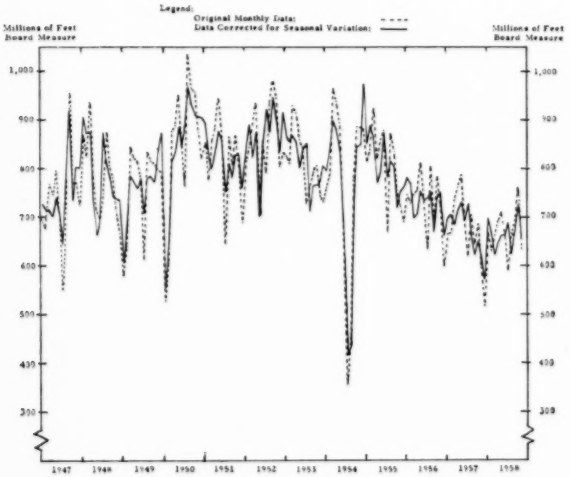
By DAVID A. BAERNCOPF
Economist, University of Oregon Bureau of Business Research

The saw-toothed series presented below shows the effects of a preliminary correction for seasonal variations in lumber production. This graph is intended to isolate the cyclical and irregular components of this volatile series.

So many random elements appear to affect month-to-month variations of lumber production that simple seasonal corrections can achieve only a minor smoothing of the series. In addition to depending on the vagaries of weather changes, lumber production is affected by strikes, freight-car shortages, price changes, and rapidly shifting decisions concerning inventory holdings. These short-term influences are compounded by longer-term changes in construction demand and the competing demands for timber by the pulp and paper and plywood industries.

LUMBER PRODUCTION, DOUGLAS FIR REGION, 1947-1958

(Monthly Totals, Millions of Board Feet)



Notes: The Douglas Fir Region includes 19 counties in Western Oregon and 19 counties in Western Washington. Approximately 72% of the total as produced in Oregon, according to recent production surveys.

Sources: Original Data Supplied by the West Coast Lumbermen's Association. Seasonal Correction by the Bureau of Business Research, Univ. of Oregon.

In spite of these strong irregular influences, a certain seasonal pattern appears fairly consistently. Production is high in March, April, and May and in August, September, and October. It is usually at very low levels both in July and in December. The most radical disturbances to a regular seasonal pattern are caused by unusual weather conditions. These conditions appear particularly in December or January to upset normal production.

In a series that has such irregular fluctuations, the cyclical movements could be isolated more sharply by using more complicated seasonal corrections than attempted here. In this preliminary version, we have used a simple ratio to centered moving average method. One pattern for the whole twelve-year period was formed by securing the average of the six central items of the derived ratios for each month. A more efficient smoothing of the series might be achieved if we utilized different seasonal corrections for various periods. For example, one seasonal correction might be applied to the 1947-53 period and a different one to the 1954-58 period.

Several interesting aspects of the corrected series may be noted. While the general expansion to the peak in August 1950 is rather roughly defined, the declines of 1951 and 1954-57 appear more clearly in the adjusted series than in the unadjusted data. For 1954, the adjusted data emphasize the greater-than-normal activity both before and after the strike from June to September as well as the sharp cuts in production that were caused by the strike.

Our adjusted series emphasizes the turning point that was reached in the past year. The activity in 1958 appears to show that the three-year decline in lumber production has been checked and that more stable or rising activity is indicated.

All of the basic data have been furnished by the West Coast Lumbermen's Association. In evaluating these data, we should recognize that they represent the activity of 147 mills that account for approximately 63 per cent of the production in nineteen counties in western Oregon and nineteen counties in western Washington. Some bias exists in these data, since the association membership consists mainly of larger firms. If we assume that larger firms' activity is more stable than that of the many small mills in the industry, we may conclude that total lumber production activity is even more volatile than this series indicates.

A limitation to using this series for forecasting business activity in Oregon lies in the fact that it includes production in the state of Washington. According to production surveys in 1955 and 1956 by the West Coast Lumbermen's Association, however, about 72 per cent of the total was produced in Oregon. With such a proportion concentrated in this state, we may be encouraged in our use of lumber production data to evaluate the Oregon business activity.

OREGON STATISTICAL REVIEW

Employment. Employment figures are supplied monthly by the Oregon State Unemployment Compensation Commission in Salem.

	Dec. 1958	*Nov. 1958*	*Dec. 1957*
Lumber & wood products	69,300	72,400	64,000
Food & kindred products	14,300	16,600	14,700
Other manufacturing	44,300	45,100	44,500
Total Manufacturing	127,900	134,100	123,200
Contract construction	21,900	23,700	20,200
Retail trade	80,800	76,300	82,100
Government	92,200	90,100	88,200
Other nonmanufacturing	147,700	148,600	150,500
Total nonmanufacturing	342,600	338,700	341,000
Total nonagricultural employment	470,500	472,800	464,200

Multnomah County Real-Estate Transactions. During December 1958 there were 585 real-estate sales amounting to $6,266,687 in Multnomah County. Of these, 418 involved residences, the sales price of which was $4,757,160; 132 were vacant properties, $482,497; and 35 were business properties, $1,027,030. Additional figures are:

	Dec. 1958	*Nov. 1958*	*Dec. 1957*
Number of sales	585	822	867
Value of sales	$ 6,266,687	$10,493,595	$ 8,887,547
Number of mortgages	980	933	636
Amount loaned	$11,760,611	$11,460,270	$ 7,451,680
Number of sheriff's deeds	4	2	1
Amount of sheriff's deeds	$25,121	$ 3,112	$ 1,799
Average residential selling price	$11,381	$11,251	$10,251

OREGON STATISTICAL REVIEW

Lumber. The figures below cover the Douglas-fir area of the Pacific Northwest. They were supplied by the West Coast Lumbermen's Association and are in thousands of feet board measure.

	Dec. 1958	*Nov. 1958*	*Dec. 1957*
Average weekly production	133,507	151,305	118,143
Average weekly orders	159,671	140,821	125,604
Unfilled orders, end of month	600,403	512,214	476,001
Lumber inventory, end of month	823,580	855,748	918,127

Index of Man Hours in Manufacturing. One of the best indicators showing changes in manufacturing activity is the man hours of industrial production workers. These figures apply only to personnel engaged in direct manufacturing activities; sales, office, and general administrative employees are excluded. The index is derived by the Bureau of Busineses Research from data supplied by the Oregon Unemployment Compensation Commission. The most recent reading covers the month of December 1958. (No adjustment for seasonal variation has been made 1951 = 100.)

	1957	*1958*		*1957*	*1958*
Jan.	78.6	72.1	July	95.4	87.9
Feb.	78.9	72.2	Aug.	101.3	97.3
Mar.	78.8	72.2	Sept.	90.9	95.6
April	85.0	75.2	Oct.	90.0	92.4
May	92.2	81.0	Nov.	82.1	84.6
June	99.8	90.0	Dec.	77.4	80.4

Advertising Linage. Local retail advertising linage in twenty daily newspapers in Oregon was 6 per cent higher in November 1958 than in November 1957.

Construction. The Bureau of Business Research, in cooperation with the F. W. Dodge Corporation, reports November 1958 construction contracts in Oregon amounting to $18,976,000, 12 per cent above November of last year. Comparative data, in thousands of dollars follow:

	Nov. 1958	*Oct. 1958*	*Nov. 1957*
Nonresidential	$ 3,825	$ 8,223	$ 6,977
Residential	9,659	17,909	5,853
Public works and utilities	5,492	15,630	4,068
Total	$18,976	$41,762	$16,898

The nonresidential construction involved 288,000 square feet in November 1958 and 698,000 in November 1957. The 782 residential units for which contracts were made in November 1958 involved 941,000 square feet; in November 1957 the figure was 599,000 square feet for 484 units. During the first eleven months of 1958, the value of building contracts in Oregon (excluding public works and utilities) was 29 per cent higher than the same period of 1957. For the eleven western states (again excluding public works and utilities) the cumulative total for 1958 was 16 per cent higher than for 1957; for the United States the total was 5 per cent above 1957.

Electric Energy. During November 1958 kilowatt hours of electricity sold by privately owned electric utilities in Oregon were virtually the same as sales in November 1957. During the twelve months ending November 30, sales were 2 per cent above the twelve-month period ending a year earlier.

BANK DEBITS

Bank debits represent the dollar value of checks drawn against the deposit accounts of individuals and business firms. Bank debits are regarded as good indicators of current business activity, although their value for this purpose may be impaired by the inclusion of large checks arising out of transfers of funds for the purchase of certain types of capital assets that do not constitute "business activity." The Bureau of Business Research collects bank debits from 167 banks and branches monthly.

Economic Areas	*Number of Banks Reporting*	*Debits Dec. 1958*	*Debits Nov. 1958*	*Debits Dec. 1957*	*December 1958 Compared with Nov. 1958*	*December 1958 Compared with Dec. 1957*
Oregon	167	$1,947,753,457	$1,806,370,812	$1,724,620,792	+ 7.8	+12.9
Portland area (Multnomah, Washington, Clackamas, Coulmbia counties)	53	1,229,687,086	1,136,009,579	1,107,276,772	+ 8.2	+11.0
Mid-Willamette Valley (Polk, Benton, Linn, Marion, Yamhill counties)	35	231,234,958	208,265,102	198,964,627	+11.0	+16.2
North Oregon Coast (Clatsop, Lincoln, Tillamook counties)	10	34,358,148	33,957,020	29,891,060	+ 1.2	+14.9
West Central Oregon (Lane, Coos, Douglas counties)	18	164,795,989	152,242,443	143,322,393	+ 8.2	+15.0
Southwestern Oregon (Curry. Jackson, Josephine counties)	11	86,068,883	78,856,984	68,661,000	+ 9.1	+25.4
Upper Columbia River (Sherman, Hood River, Wasco, Gilliam, Wheeler counties)	9	30,616,142	28,724,063	27,773,382	+ 6.6	+10.2
Pendleton area (Umatilla, Morrow counties)	8	32,565,249	32,382,695	30,251,946	+ 0.6	+ 7.6
Central Oregon (Deschutes, Jefferson, Crook counties)	5	30,611,751	31,681,909	27,994,271	− 3.4	+ 9.4
Klamath Falls area (Klamath, Lake counties)	5	44,339,920	39,911,013	37,978,815	+11.1	+16.7
Baker, La Grande area (Baker, Grant, Wallowa, Union counties)	8	33,443,813	34,686,218	28,305,725	− 3.6	+18.2
Burns area (Harney, Malheur counties)	5	30,031,518	29,653,786	24,200,801	+ 1.3	+24.1

BUILDING PERMITS

Building permits give an indication of building operations planned rather than actual construction under way. Care must be taken, in interpreting these data, to allow for the lag which may elapse between the issuance of the permit and the beginning of actual construction. The data have been collected by the Bureau of Business Research.

	New Residential Dec. 1958	*New Non-residential Dec. 1958*	*Additions, Alterations & Repairs Dec. 1958*	*Totals Dec. 1958*	*Totals Nov. 1958*	*Totals Dec. 1957*
Albany	$ 149,000	$ 276,000	$ 28,000	$ 453,000	$ 251,700	$ 70,100
Baker	.....	75,400	21,125	96,525	86,250	45,215
Bend	75,000	19,545	5,650	100,195	92,210	91,950
Coos Bay	65,000	.....	3,224	68,224	102,996	50,630
Corvallis	310,900	26,400	9,225	346,525	231,050	78,300
Eugene	227,400	80,100	30,472	337,972	307,495	302,990
Grants Pass	.....	84,050	2,400	86,450	88,550	69,450
Hillsboro	41,400	1,600	557	43,557	38,797	69,075
Klamath Falls	28,000	2,500	20,321	50,821	81,200	43,730
La Grande	36,880	.....	600	37,480	1,900	2,150
McMinnville	42,500	7,375	1,900	51,775	102,850	29,000
Medford	176,600	57,920	41,275	275,795	348,075	93,115
North Bend	40,440	3,500	3,960	47,900	89,405	23,918
Pendleton	75,000	.....	4,710	79,710	48,980	1,295,840
Portland	1,382,550	1,441,180	876,370	3,700,100	4,592,745	2,321,355
Roseburg	22,700	5,350	23,550	51,600	28,910	35,965
Salem	243,700	30,930	191,260	465,890	250,627	87,165
Springfield	28,602	108,858	71,969	209,429	65,590	21,420
The Dalles	94,778	2,250	23,950	120,978	89,674	24,665
*Clackamas County	162,009	163,700	11,400	337,109	384,695	.....
Douglas County	30,744	48,620	250	79,614	42,805	4,000
Lane County	411,018	133,632	52,746	597,396	454,657	366,548
*Marion County	372,600	53,500	11,960	438,060	542,750	.....
Multnomah County	1,116,635	284,700	71,750	1,473,085	1,111,826	1,518,938
Wasco County	17,800	.....	.....	17,800	86,000	6,000
106 other communities	652,475	867,626	413,045	1,933,146	1,126,065	1,005,168
*Total	$5,269,122	$3,557,536	$1,898,309	$10,724,967	$9,720,357	$7,656,687

* Information is not available on Dec. 1957 building permits for Clackamas County and Marion County (outside of Salem). In the interest of comparability, data for these areas have not been included in the Nov. and Dec. 1958 state totals.